# APPARATUS, METHOD AND COMPUTER PROGRAM PRODUCT FOR PROVIDING ACCESS TO A CONTENT

## TECHNICAL FIELD

**[0001]** The present invention relates to a method at an apparatus for providing a way to embed access to dynamic services within a media file. The invention further relates to an apparatus and a computer program product for providing a way to embed access to dynamic services within a media file.

## BACKGROUND INFORMATION

**[0002]** This section is intended to provide a background or context to the invention that is recited in the claims. The description herein may include concepts that could be pursued, but are not necessarily ones that have been previously conceived or pursued. Therefore, unless otherwise indicated herein, what is described in this section is not prior art to the description and claims in this application and is not admitted to be prior art by inclusion in this section.

**[0003]** Cameras are often used to capture images and/or video in many events and locations users visit. There may also be some other users nearby capturing images and/or video in the same event but from a different view point. The images and videos can be uploaded to a server in a network, such as the internet, to be available for downloading by other users. When one plays back the video s/he might also want to see images and/or videos captured by others during the event, or s/he might want to obtain other information relating to the event and/or person(s) visible in the video(s). Users may wish, for example, to seek alternative view points, alternate tracks, alternate edits and alternate media even during playback or rendering of media. It may, however, be a cumbersome task to find those images, videos and/or other information from the network.

## SUMMARY

**[0004]** This invention is related to providing a way to embed access to dynamic services within a media file in which information relating to the dynamic services are embedded.

**[0005]** Some embodiments relate to seeking multiview, multimodal and/or multicontent types in a dynamic manner during a session within a media renderer or a browser. This may be performed by utilizing additional information stored or otherwise attached with the media. Some embodiments provide a framework that provides logical embed within media files allowing seeking several additional features or content back from a server or another device during playback time. This may allow the user to dynamically interact with the content while playing media providing a richer experience while being able to leverage the full bandwidth of available media and media types related to the content being played.

**[0006]** In some embodiments the logical extension embedded allows even players embedded within web content to leverage hypertext mark-up language version 5 (HTML5) and beyond with browser capabilities in seeking content.

**[0007]** Some embodiments provide means to keep media size relatively small when transmitting to a device over wireless network although there would be some multicontent available for the media. Some embodiments also provide multi-content that are media (e.g. video) segment specific enabling richer media. Access to the multi-content may also be dynamic as sought by the user. In some embodiments multiple access types are supported with access types dependent on multicontent-type. Many devices, browsers and rendering engines can be arranged to support some embodiments. Practical implementations may be made to be compatible with some existing standard or standards or they may use some proprietary methods.

**[0008]** In this context the term multicontent means additional content that users can perceive about a particular segment of media (e.g. a video). The additional content can either be statically provided through embedding within the media and displayed by the renderer suitably or can be dynamic where it can be sought from external sources from within a segment as and when needed. Each content type may have a different source and a different model of accessing those. The access models and the semantic blocks for accessing the additional content may vary in different embodiments.

**[0009]** According to a first aspect of the invention, there is provided a method comprising:

**[0010]** defining a content for at least one segment of a media presentation;

**[0011]** providing a meta information element for the media presentation;

**[0012]** including meta data relating to the content of the at least one segment to the meta information element, the meta data comprising information on how to access the content of the segment; and

**[0013]** including a reference to the meta data of the content in the segment.

**[0014]** According to a second aspect of the invention, there is provided an apparatus comprising at least one processor and at least one memory including computer program code, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform at least the following:

**[0015]** define a content for at least one segment of a media presentation;

**[0016]** provide a meta information element for the media presentation;

**[0017]** include meta data relating to the content of the at least one segment to the meta information element, the meta data comprising information on how to access the content of the segment; and

**[0018]** include a reference to the meta data of the content in the segment.

**[0019]** According to a third aspect of the invention, there is provided a computer program product including one or more sequences of one or more instructions which, when executed by one or more processors, cause an apparatus to perform at least the following:

**[0020]** define a content for at least one segment of a media presentation;

**[0021]** provide a meta information element for the media presentation;

**[0022]** include meta data relating to the content of the at least one segment to the meta information element, the meta data comprising information on how to access the content of the segment; and

**[0023]** include a reference to the meta data of the content in the segment.

**[0024]** According to a fourth aspect of the invention, there is provided an apparatus comprising:

**[0025]** means for defining a content for at least one segment of a media presentation;